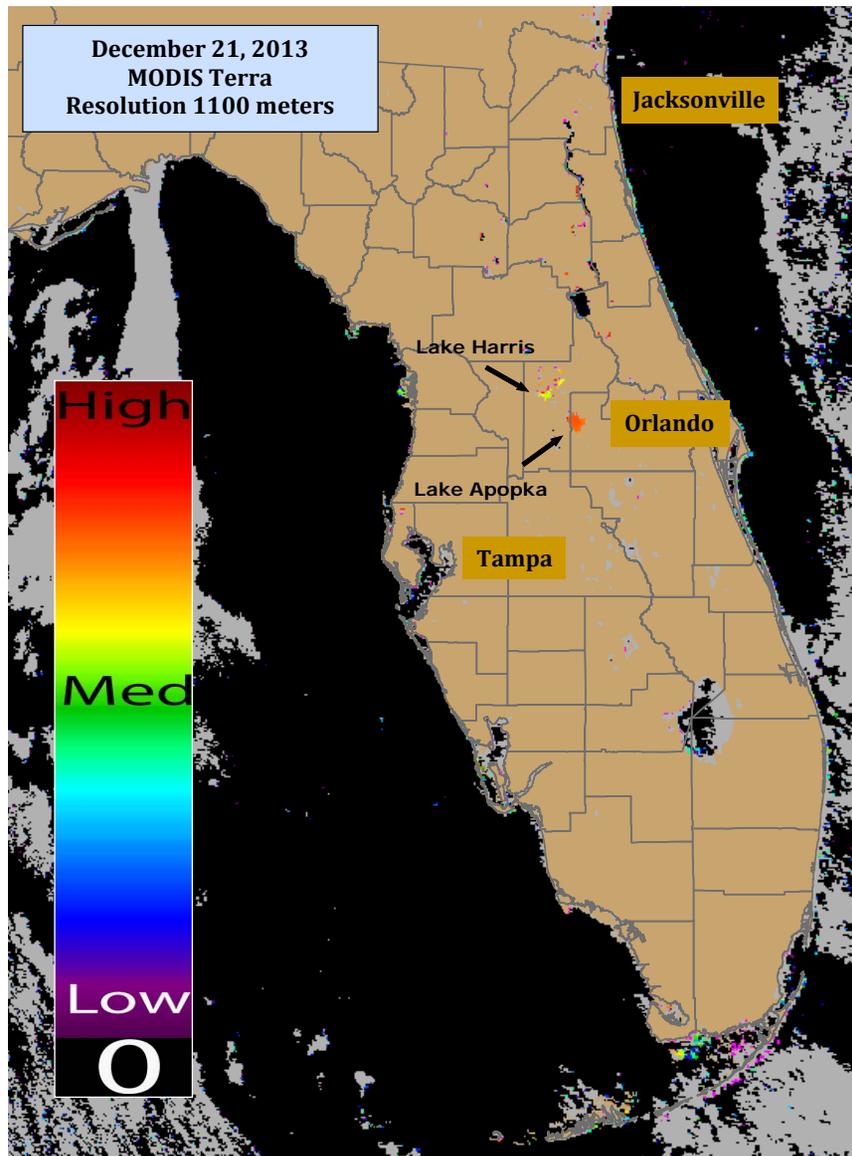


To report an illness related to a freshwater, estuarine, marine toxin or harmful algal bloom, please contact the Florida Poison Information Center at 1-800-222-1222. Images/data obtained from Florida Fish and Wildlife Research Institute, Florida Water Management Districts, National Oceanic and Atmospheric Administration (NOAA), NOAA National Climatic Data Centers and National Weather Centers. Support to produce this report from NOAA/NASA Contract NNH08ZDA001N.



CyanoHAB Conditions Report

- Lake Apopka (Orange/Lake Counties) displayed a high estimated elevated chlorophyll-a concentration.
- Lake Harris (Lake County) displayed medium/high estimated elevated chlorophyll-a concentrations.

Note: Available image is Terra, which is not optimized for aquatic environments. Some conditions may not be accurately represented for chlorophyll and cyanobacteria.

2014 tourism: It's blue skies ahead (if the water's not brown)



December 25, 2013

"Southwest Florida agencies optimistic about visitor numbers, but last summer is not forgotten"

Sunny best describes the 2014 outlook of Southwest Florida tourism promoters. To be sure, they are confirmed optimists. Still, their bullishness over the year ahead is good news for a lifeblood industry that pumps about \$2.6 billion into the local economy, and employs an estimated 1 in 5 people in Lee County. "I don't see a lot of risks. ... I'm anticipating another record year," said Jack Wert, executive director for the Naples, Marco Island, Everglades Convention & Visitors Bureau ... Fast-forward to summer 2014, when Pigott has unanswerable questions and concerns. Last summer's rainy season and amped-up releases of polluted water from Lake Okeechobee turned Gulf waters brown along some shorelines, and raised fears for the health of local estuaries. Hoteliers reported few early departures because of the brown water, but Pigott wonders: "Will people who had a bad experience come back? That's weighing heavily on my mind." Next summer, if the water looks great but visitation still is soft, count on Lee County tweaking its advertising plan, Pigott said. The potential problem areas "are the same ole things: red drift algae and red tide," said Ric Base, president of the Sanibel & Captiva Islands Chamber of Commerce. Red drift algae actually are animal organisms that some people say look like piles of washed-up sauerkraut. Red tide kills marine life, and gives many humans itchy, watery eyes, scratchy throats and labored breathing. Because of the Internet and social media (these subjects) "never really go away," Base said. To counteract impressions that linger long after the water nastiness is gone, communication must be relentless, according to Base.

See: <http://www.news-press.com/article/20131226/COLUMNISTS14/312260036/2014-tourism-s-blue-skies-ahead-water-s-not-brown->

**** Due to background levels of *K. brevis* off Florida's SW coast, status reports for Florida red tide will be suspended until bloom concentrations re-occur.**

MODIS Images display a chlorophyll-a index generated with a Moderate Resolution Imaging Spectroradiometer provided by the National Aeronautics and Space Administration (NASA)

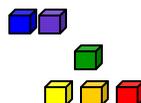
Very low likelihood of a bloom

May indicate clouds or missing data

Low estimated chlorophyll-a concentrations

Medium estimated chlorophyll-a concentrations

Higher estimated chlorophyll-a concentrations



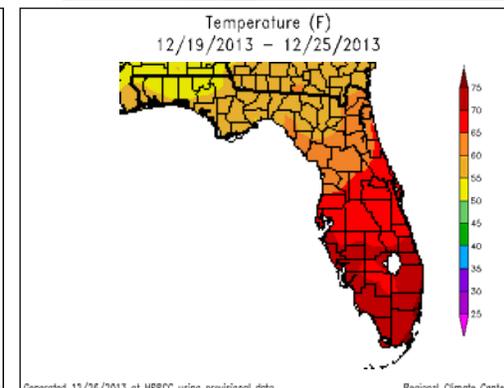
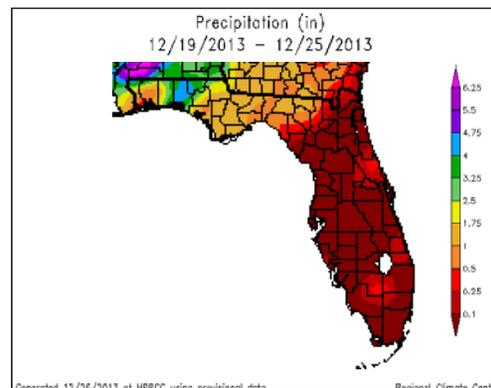
Interpreting Moderate Resolution Imaging Spectroradiometer Data

- The Moderate Resolution Imaging Spectroradiometer (MODIS) is deployed by NASA onboard the Terra (EOS AM) and Aqua (EOS PM) satellite. It passes over the earth, collecting new imagery every 1-2 days.
- This imagery is used as a surveillance tool. Data collected by the MODIS sensor are used to generate a chlorophyll-a index which is used to forecast harmful algal blooms. The results are not specific to any one HABs species and should be followed-up with onsite field observations. Data is only suggestive of a potential HAB event.
- MODIS uses a spectral band which is much coarser than MERIS, therefore only select larger water bodies in FL are visible using this technology.
- MODIS is better at depicting low to medium chlorophyll-a concentrations so once a potential bloom is depicted, a switch in algorithms may be used to improve the visibility. MODIS has a few spectral bands which have higher resolution that are more comparable to MERIS although these bands do not cover all of FL.
- Several environmental factors may affect how results can be interpreted. For example, areas with abundant aquatic vegetation may present with a high Chl-a index resulting in a false positive bloom reading.
- The sensor identifies biomass near the surface (in the upper few feet of water). As a result, it may underestimate the total biomass for blooms that are mixed or dispersed through the water column.
- While patches of red or warm colors may indicate higher chlorophyll-a concentrations, these data have not been verified in most cases using ground-truth methods.

Weather Conditions: Precipitation and Temperature - 12/19/13 to 12/25/13

- Weather conditions can impact the duration and location of blooms and the satellite imagery shown in this report may no longer be relevant.
- Images represent the last image taken with a realization that blooms may have moved, dissipated or intensified.
- Cloud coverage can obscure imagery and create patches or gray areas on map and obscure bloom detection.

No MODIS image available this week



To review HABs satellite reports in the Gulf of Mexico and marine waters visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive at:
<http://tidesandcurrents.noaa.gov/hab/bulletins.html>



For Individual Weather Station Data, visit:
<http://www.sercc.com/perspectives>

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